

NATIONAL SECURITY CONSIDERATIONS AND DOMESTIC LAND PROTECTION
EFFORTS: DO U.S. SENATORS FIND COMMON GROUND?

By
Anders Reynolds

A research study submitted to Johns Hopkins University
in conformity with the requirements for the degree of Master of Global Security Studies

Baltimore, Maryland
August, 2020

© 2020 Anders Reynolds
All Rights Reserved

Abstract

What national security concerns, if any, do U.S. Senators consider relevant to domestic land protection issues? Past research on the nexus between national security and land protection reveals growing awareness of the interconnectedness of the two issues. In an effort to build on that research, and to specifically understand how and why U.S. Senators might adopt national security framing in their shepherding of land protection measures through Congress, this paper examines the Senate Floor speeches of decision-makers themselves. The data suggests decision-makers do see a connection between the two issues, particularly where energy independence is concerned.

This paper was researched and written under the guidance of Professor Sarah Clark, Johns Hopkins University. It was reviewed by Professors Lester Munson and Will Rogers.

Acknowledgements

The author would like to acknowledge the helpful guidance offered by the faculty at Johns Hopkins University, specifically the advice of Professor Sarah Clark and Dr. Mark Stout, who each supported this paper from the beginning and improved it muchly along the way. The qualitative research portion of this paper would have been impossible without the superb instruction of Dr. William Marcellino. Professors Lester Munson and Will Rogers each provided invaluable feedback on earlier drafts. Additionally, the author is grateful for the patience and advice of his colleagues at the Southern Environmental Law Center, in particular Nat Mund.

Table of Contents

Abstract.....	ii
Acknowledgements.....	iii
Table of Contents.....	iv
List of Tables.....	v
Introduction.....	1
Literature Review.....	4
Methods.....	10
Data Analysis.....	12
Conclusions.....	20
Appendix 1: Code Tree.....	24
Appendix 2: Questionnaire Script.....	27
Bibliography.....	28
Curriculum Vitae.....	30

List of Tables

Code Count.....	14
Code Tree (Appendix 1)	24

Introduction

While the majority of the 640 million acres of federal estate in the United States is held as public land and managed under statutes inspired by a “multiple-use” mandate that balances public access with natural resource preservation and extractive processes, some 8.8 million acres are administered by the Department of Defense (DOD), which is under no such mandate.^{1, 2} These DOD acres are distinct from other federally-managed lands in two important ways: first, unlike land managed by the U.S Fish and Wildlife Service (USFWS), the Bureau of Land Management (BLM), the National Park Service (NPS), or the U.S. Forest Service (USFS), the acquisition and management of DOD lands is specifically enumerated in the U.S. Constitution;³ secondly, these lands are managed to support one unambiguous goal: national security.⁴

In recent decades, military installations on these DOD lands have had to weigh the need for more training space (ensuring troop readiness) against internal concerns about urban sprawl and external pressures regarding environmental compliance.⁵ Stand-off distancing offers a unique solution to all three of these problems, and DOD programs like the Readiness and Environmental Protection Initiative (REPI) have allowed installation managers to partner with local governments and/or non-profits in order “to acquire property around military bases to prevent private development from encroaching on military training lands, ensuring long-term sustainability for DOD operations. At the same

¹ *Omnibus Parks and Public Land Management Act of 1996, U.S. Code 16* (1996).

² U.S. Library of Congress, Congressional Research Service, *Federal Land Ownership: Overview and Data*, by Carol Hardy Vincent, Laura A. Hanson, and Lucas F. Bermejo, R42346 (2020).

³ U.S. Const. art 1. Sec. 8. Cl. 17.

⁴ Bozarth, Graci. “Winning on All Fronts: A Case Study of the Army’s Compatible Use Buffer Program at Fort Riley, Kansas.” *The Urban Lawyer* 48, no. 1 (2016): 146.

⁵ Bozarth, 149-150.

time, the land is used to conserve plant and animal life that may otherwise be displaced by commercial or residential construction.”⁶

These stand-off distancing programs draw a bright line connecting national security concerns and environmental issues – specifically in respect to land protection. They exemplify a sort of symbiotic relationship that assures that advocates of both a strong national security posture and greater land protections succeed where independent efforts to achieve their goals might have failed. It follows that those who wish to see higher levels of protection for federally-managed landscapes under the purview of USFWS, BLM, NPS, or USFS might recognize the utility in marrying their efforts to national security concerns, and indeed the government body that would provide those protections – the U.S. Congress – has recently deliberated on a number of measures that tie land protection to some aspect of national security.

For example, in order to preserve the story of the Manhattan Project and interpret its complicated role in the Cold War, the 2015 National Defense Authorization Act established a new National Park with three distinct units in Los Alamos, NM, Hanford, WA, and Oak Ridge TN.⁷ More recently, the whole of Nevada’s federal delegation asked Congress to act on a wilderness bill that would not only preserve desert bighorn sheep habitat but expand the U.S. Air Force’s Nevada Test and Training Range.⁸ And as this research was being conducted, the U.S. House of Representatives successfully amended

⁶ Kuli, Alex. “Authorizers Endorse More Funding For Conservation Buffer Zones.” *Inside the Pentagon* 21, no. 24 (2005): 13.

⁷ “Congress Passes Manhattan Project National Historical Park Act,” Atomic Heritage Foundation, December 12, 2014, <https://www.atomicheritage.org/article/congress-passes-manhattan-project-national-historical-park-act>.

⁸ Gilroy, John. “Nevada Wildlife Refuge Would Gain Wilderness Status Under Bill in U.S. Congress,” The Pew Charitable Trusts, February 13, 2020, <https://www.pewtrusts.org/en/research-and-analysis/articles/2020/02/13/nevada-wildlife-refuge-would-gain-wilderness-status-under-bill-in-us-congress>.

the *2021 National Defense Authorization Act*, the annual funding vehicle for this country's armed services, to include over two million acres of wilderness protection for federally-managed lands in California, Colorado, and Washington. One of those amendments includes language honoring Camp Hale, the training grounds of the 10th Mountain Army Division.⁹

Whether or not public land protection advocates have accepted as fact the increased efficacy of framing their own issues as important to national security, the purpose of this case study is to provide insight and better understanding of the ways in which *U.S. Senators* consider national security impacts throughout the legislative process by which land and protection measures are approved by the upper chamber of the U.S. Congress. As a review of the literature will show, the nexus between the environment and national security has been widely examined,¹⁰ and a multitude of academic works explore the ramifications of climbing temperatures, rising seas, more dramatic weather, and increased instances of resource migration on a state's natural resources.¹¹ However, there is scant data examining whether or not these or any other environmental threats impact the decision-making of elected officials working on preserving public lands and waters.

This paper aims to shed light on that decision-making process, both through an examination of literature outlining the factors that lead Senators to draft, introduce, and champion bills, but also through other sources of evidence. Namely, an interview with a U.S. Senator, where the questions are designed to identify the prevalence of national

⁹ Wallace, Jacob. "CORE Act passes U.S. House as rider to national defense bill." *The Durango Herald*, July 21, 2020, <https://durangoherald.com/articles/332576>.

¹⁰ Levy, Marc A. "Is the Environment a National Security Issue?" *International Security* 20, no. 2 (1995): 35-62.

¹¹ Busby, Joshua W. *Climate Change and National Security: An Agenda for Action*. Report. Council on Foreign Relations, 2007. 4-10.

security concerns throughout the bounded system of the legislative process, from initial outside advocacy through bill introduction and legislative horse-trading to the Senator's own communication with constituents both during and after the process.

By examining these contexts through qualitative approaches, we can better understand the importance (or lack thereof) of national security messaging vis à vis conservation goals, and begin to answer the questions: *What national security concerns, if any, do U.S. Senators consider relevant to domestic land protection issues?*

Literature Review

Ultimately, this research question will be answered by analyzing data gathered from document analysis of the floor speeches of U.S. Senators themselves, but an initial review of past research on similar topics will help to ensure those sources of evidence are appropriately examined for quality, usable data. Further, a literature review will help to hone a hypothesis about what answers we might find inside that data. The literature concerning the relationship between national security concerns and environmental factors is too robust to be covered in the pages available to this study, but nonetheless this review section will endeavor to offer as comprehensive a view as possible.

It would help to understand the nexus between national security and land use policy. While programs like REPI and legislation like that preserving the legacy of the Manhattan Project are examples where the two issues have been connected by decision-makers, it remains to be seen whether or not these are instances of political convenience, recognition of a new and vital interconnectedness of the two matters, or both.

This paper earlier referenced DOD's REPI program, which establishes buffer zones around military installations where development would be problematic, matching these

depopulated areas with uses that work best for wild or natural areas, like habitat or watershed protection. Illustrative of the pressures that led to the creation of this stand-off program is the story of Fort Bragg and the red-cockaded woodpecker. Since 1970, the installation's commanders had been required by the Endangered Species Act to protect the bird, whose meager population preferred the rural area outside the Fort as habitat. But by 1989, increased human population and civil infrastructure pressures outside Fort Bragg pushed the birds further inside the installation's combat training areas. Feeling squeezed between USFWS's desire to protect the bird and Fayetteville, NC's suburban growth, Fort Bragg entered into a partnership with The Nature Conservancy (TNC), partly funding that land trust's purchase of nearby buffer properties. The result was positive for all parties concerned: the Army was able to establish important stand-off distancing from nearby development and ensure that the woodpecker didn't move any further into troop testing areas, TNC was able to protect important endangered species habitat, and the woodpecker population rebounded, growing from 238 family groups in 1992 to 483 family groups by 2014.¹²

Land resilience and military readiness both appear to be improved by these programs. In fact, researchers at RAND Corporation have determined that REPI programs have been successful when measured against the following criteria: “[1] promoting military readiness and other mission benefits [, 2] address[ing] sprawl and limiting other incompatible uses [, 3] preserving habitat and other environmental benefits [, 4] community relationships and partnership benefits [, and 5] additional community benefits.” In addition,

¹² Bozarth, 152-154.

in the years RAND studied REPI projects, federal spending leveraged more than a 2-1 return in partner funding.¹³

While these stand-off projects demonstrate tangible benefits to our wildlife, our watersheds, and to the readiness of our men and women in uniform, they do not tell the full story of the sometimes antagonistic relationship between installation commanders and regulatory compliance officers, which in the past has led to successful attempts by the DOD to amend both the Migratory Bird Treaty Act and The Endangered Species Act.¹⁴ Additionally, legal scholars like CC Vassar have argued that the National Environmental Policy Act – with which federal agencies must comply before moving forward on major projects – should be modified to provide an exception when issues of national security are concerned.¹⁵ However, as John Ruple and Heather Tanana point out: less than 1% of all qualifying projects are subject to the highest, most thorough level of examination offered under NEPA, and even considering criticisms of cost and likelihood for litigation, “data supports the conclusion that NEPA is working more efficiently than its critics contend.”¹⁶ These disagreements reflect a larger debate in the discourse surrounding the national security contexts of environmental protection, including land preservation.

That debate centers around the examination of what Nicole Detraz and Michele M. Betsill call “two distinct discourses linking security and the environment:” *environmental*

¹³ Lachman, Beth E., Anny Wong, and Susan A. Resetar. “How Encroachment Is Being Addressed.” In *The Thin Green Line: An Assessment of DoD’s Readiness and Environmental Protection Initiative to Buffer Installation Encroachment*, xv. RAND Corporation, 2007.

¹⁴ Vogel, Catherine M. “Military Readiness and Environmental Security – Can They Co-Exist?” *Real Property, Probate and Trust Journal* 39, no. 2 (2004): 315-55.

¹⁵ Vassar, CC. “NRDC v. Winter”: Is NEPA Impeding National Security Interests?” *Journal of Land Use & Environmental Law* 24, no. 2 (2009): 307.

¹⁶ Ruple, John and Heather Tanana, “Debunking the Myths Behind the NEPA Review Process,” *Natural Resources & Environment* 35 (January 2020). <https://ssrn.com/abstract=3520212>.

security and *environmental conflict*.¹⁷ They argue that the former, until recently, has been the dominant discourse in terms of understanding the risks of climate change and environmental degradation on human populations. In their words, “human welfare is of central concern” in conversations of *environmental security*.¹⁸ This discourse is irrelevant to any discussion about the motivations of U.S. Senators when it comes to land protection, except to say that if decision-makers accepted this frame, one would expect their statements on land protection to be empty of any references to national security concerns.

Conversely, *environmental conflict* is defined as a condition whereby the state acts as the protagonist in any number of serious societal conflicts, driven by factors including resource migration and resource scarcity.¹⁹ A growing number of scholars and advocates place increasing emphasis on *environmental conflict*, with Thomas F. Homer-Dixon summarizing the importance that conservation policies like land protection will play in mitigating the threats presented to the state:

In the next decades, growing populations, rising per capita resource consumption, and persistent inequalities in resource access guarantee that scarcities of renewables will affect many poor countries with unprecedented severity, speed, and scale. As a result, resource substitution and conservation tasks will be more urgent, complex, and unpredictable, boosting the need for many kinds of ingenuity. In other words, these societies will have to be smarter – technically and socially – in order to maintain or increase their well-being in the face of rising scarcities.²⁰

The think-tank Center for a New American Security agrees, labeling the increased interconnectedness between national security and natural resources as “natural security.”²¹

¹⁷ Detraz, Nicole, and Michele M. Betsill. "Climate Change and Environmental Security: For Whom the Discourse Shifts." *International Studies Perspectives* 10, no. 3 (2009): 305.

¹⁸ Ibid., 306.

¹⁹ Ibid., 305.

²⁰ Homer-Dixon, Thomas F. "Overview." In *Environment, Scarcity, and Violence*, 12-27. Princeton, New Jersey: Princeton University Press, 1999.

²¹ Parthemore, Christine, and Will Rogers. Report. Center for a New American Security, 2010: 7.

While admitting that our country's national security community is attuned to threats of scarcity among nonrenewable resources like oil (often found beneath our country's public lands), their report highlights the unsustainable, worldwide overuse of renewable resources, including "forests and... biodiversity loss," that threaten to dry up rivers and destroy arable land.²² While much of their work focuses on new approaches for dealing with natural security issues, they emphasize one important point, echoed by former Secretary of Defense Robert Gates: "The challenges confronting our nation cannot be dealt with by military means alone."²³

Scarcity is not the only factor driving resource instability. The term "resource curse" was first coined by Richard Auty in 1993, and its efficacy in describing the political and social volatility that can often be observed – if not exactly quantified – in states with abundant natural resource gifts has been debated ever since.²⁴ Scholars examining the ramifications of this curse don't often touch on land protection specifically, but their research does shed light on the phenomenon's ability to create a "false sense of security" among decision-makers, driving them to "ignore the adverse effects of their actions on the generations that come after the natural resource is exhausted."²⁵

Returning to our discussion of *environmental conflict* and natural security, others agree that "the national security context is changing as a result of the environmental changes we expect to see in the coming decades."²⁶ Michael B. McElroy and D. James

²² Ibid., 7.

²³ Ibid, 8.

²⁴ Ross, Michael L. "What Have We Learned about the Resource Curse?" *Annual Review of Political Science* 18 (May 2015): 240.

²⁵ Van Der Ploeg, Frederick, and Steven Poelhekke. "Volatility and the Natural Resource Curse." *Oxford Economic Papers*, New Series, 61, no. 4 (2009): 736-737.

²⁶ McElroy, Michael B., and D. James Baker. "Climate Extremes: Recent Trends with Implications for National Security." *Vermont Journal of Environmental Law* 15, no. 4 (2014): 737.

Baker point out that this is more than mere Malthusian fear mongering, and represents a growing body of data that shows out-of-control consumption driving resource use at a time when increased warming threatens to disrupt “oceanic and atmospheric conditions,” leading to “persistent and amplified extreme weather events.”²⁷ They point out that both the 2010 Quadrennial Defense Review and the 2010 national Security Strategy classify the warming climate as a potential to greater *environmental conflict*, and emphasize the vulnerabilities to food security and societal stability that will emerge as farming and herding are less able to feed native populations and provide a source of export income.²⁸

To emphasize the connection between these threats to national security and land preservation, one need look no further than the United Nations. Their International Panel on Climate Change argues that these climate threats can be counterbalanced by additional investments in public land protection, and has emphasized the role that land conservation, preserved ecosystems, and intact forests will play in limiting climbing temperatures around the globe.²⁹

Finally, there are those who argue that “militant environmentalists” deserve some blame for the current situation in which we find ourselves. Their argument goes like this: the United States would not find itself at a natural security deficit relative to China and other foreign powers if it weren’t so aggressive about prohibiting extractive industries on federally-managed land. Without the “raw materials” to compete, Americans will see fewer jobs, higher energy prices, and no domestic rare-earth mineral operations – the latter two

²⁷ Ibid., 742.

²⁸ Ibid, 738.

²⁹ UN IPCC, 2019: “Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems,” August 7, 2019.

of which directly impact military readiness and national security.³⁰ But this contrarian argument, too, betrays the obvious interconnectedness of land protection and national security, even as it overstates the conflict areas between the two issues.

Methods

Given this interconnectedness, what should we expect to see in the floor speeches of Senators if they indeed perceive a connection between wilderness and national security? Most convincing would be the outright inclusion of specific examples of the belief that if the United States must act in the face of environmental conflict, that its response would include prioritizing the virtues of wilderness most important to natural security.

Case studies exploring a bounded system such as passage of land protection bills often match interviews with document and record analysis. While our paper will explore the floor speeches of federally elected officials over the years 2015-2020, data collection associated with a larger study would be more robust, exploring a wider variety of public documents (including committee documents, press releases, campaign speeches, constituent town hall meetings, and published opinion pieces) over a longer period of time.

These scoping decisions were not made arbitrarily. While the Congressional Record offers a broad range of sources and statements with which one might examine the motives pertinent to this paper, time constraints presented a hurdle to examining more than the last five years. Further, there was concern that a broader analysis synthesizing the perspectives of Members of the U.S. House of Representatives might complicate cross-

³⁰ Driessen, Paul. "Greens Shackle National Security – And Renewable Energy." *Energy & Environment* 22, no. 4 (2011): 425-27.

comparison analysis, and so data collection was limited to the upper chamber of the U.S. Congress.

Critically, this paper also limits its review to speeches given on wilderness protection, in order to provide a baseline comparison between the speeches. The 1964 Wilderness Act called for the “preservation of wilderness character” for certain areas of federally-managed lands but left no clear definition of how that character would be determined.³¹ Four distinct descriptions found in Section 2C of that Act are now accepted by managing agencies as guiding virtues for justifying the existence of wilderness areas: untrammeled quality, undeveloped quality, naturalness, and opportunities for solitude or primitive and unconfined recreation. But whether or not a landscape expresses these necessary qualities, “wilderness” is a legal definition, and its designation is determined solely by the U.S. Congress. Naturally, decision-makers have accounted for their support for wilderness in myriad ways, so this analysis must consider the words that Senators themselves have used to describe their motivations in speeches on the Senate Floor as a litmus test for better understanding what virtues are most often used to justify land protection bills.

This document analysis provides us with the best on-record understanding of what qualities elected officials judge to be most important vis-à-vis wilderness designation, but unfortunately it may not tell the whole story. As politics is inherently an exercise in horse-trading, much of the work decision-makers dedicate to the passage of wilderness bills is necessarily hidden from view and may not ever appear in a form that we are able to parse in any instructive way.

³¹ *The Wilderness Act*, 16 U.S.C. (1964) § 1131

Samples sizes for case studies are usually focused around the purposeful selection of a handful of participants, but an inductive approach to thematic analysis based on the coding of public record would likely benefit from expanding the records examined to two or three dozen public documents, with effort made to capture diversity in the types of public document analyzed, as well as political party, gender, and geographical area represented by the decision-maker associated with said records. This type of maximum variation sampling ensures a diverse set of viewpoints is selected up front and contributes to the overall rigor of the analysis.

Data Analysis

This paper examines every instance of a Senate Floor Speech that mentions the word “wilderness” between January, 2015 and July, 2020. All told, twenty-one floor speeches made by eleven Senators representing ten states touched on wilderness issues in that timeframe. The texts of those speeches were imported into a web-based mixed methods tool, which allowed for analysis of the speeches through coding. In addition to the frequency with which themes related to wilderness protection appear, coding allows for the discovery of new themes, even as a researcher is exploring a set of a priori themes based on what they anticipate the data might show.

The data collection - a close reading of texts – was used to build a code tree in order to identify major themes and respective subthemes. This practice of metacoding, where data is arranged and measured for patterns of frequency, credibility, and even uniqueness, should be expected to reveal certain a priori typologies: on the one hand, the success of wilderness protection in protecting wildlife habitat or critical watersheds, or in preventing

urban sprawl, or in preventing additional resource extraction; on the other hand, it may disclose dissatisfaction rooted in a belief that wilderness prevents access, or that the land protection achieved was too little to make a difference. Importantly, validity was increased through an emphasis on triangulating data collected during coding against an interview with a sitting U.S. Senator who had engaged on wilderness protection bills, and which provides an additional set of data for analyses for examining our research question.

Analysis of floor speeches

In this case, given a set of a priori themes related to the virtues of wilderness character mentioned earlier in the paper, one might expect an analysis to reveal strong repetition of words like “natural,” “unspoiled,” “solitude,” “scenery,” and recreation.” As the code tree in the appendix of this paper shows, while one major a priori theme – *conservation* - was indeed present, other themes – like *process values* – emerged. Of particular importance to this paper was the presence of the *national security* theme, which we will explore in-depth below.

The identification of themes was relatively easy, as the data examined was obvious and direct. As many of these floor speeches came at the end of the wilderness designation process, when bill passage was a foregone conclusion, there was little reason for decision-makers to speak in metaphor or otherwise not speak plainly. Surprisingly, one theme that might be considered an indigenous typology with frequent occurrence in the world of wilderness preservation – *solitude* – was not often included as a theme in floor speeches. A different analysis of these themes might even exclude it from discussion, but as it remains

a central feature of wilderness character, it has been included it in the tables founds in the appendix and below.

Table 1: Code Count

Code Name	Code Count
Conservation (Parent Code)	55
Development	7
Natural Resources	16
Plants & Animals	12
Scenery	6
Solitude	3
Historic Values (Parent Code)	5
Native American	1
National Security (Parent Code)	12
Drinking Water	1
Energy Independence	10
Negative Aspects (Parent Code)	12
Access (Negative)	8
Process Values (Parent Code)	18
Collaboration	12
Longevity	1
Wide Support	5
Recreation (Parent Code)	7
Access	1
Activities	3
Economics	2

As one can see in Table 1, *conservation* is a major theme appearing in the data analysis and is frequently relied upon to justify support for a wilderness bill. A typical quote concerning this theme touches on the naturally occurring qualities of the landscape discussed, with natural beauty and ecological vibrancy or diversity appearing as common subthemes. As Senator Dianne Feinstein states in her floor speech about the *California Desert Protection and Recreation Act*: “The desert’s sweeping desert vistas and rugged mountain terrain not only provide for a truly remarkable backcountry experience, but also

provide vital refuge for everything from bighorn sheep and desert tortoises to Joshua Trees and Native American artifacts.”³²

Somewhat less frequent are appeals made to the beauty of the *scenery*, which this paper includes as a sub-code to *conservation* touching specifically on viewscape-centered experiences that were distinct from more intense and immersive words that ultimately were coded as *natural resources*: “rugged,” “pristine,” and “unspoiled.” Almost nearly as frequent were references to wilderness’s role in staunching back development, though none of the floor speeches specifically used that frame to talk about the threat of encroachment to military installations or the stand-off capabilities of the same. Less common still were references to solitude.

The second most popular theme among decision-makers were *process values*, which this analysis codes as three distinct phenomena: *collaboration*, or the talk surrounding the “bipartisan” or “collaborative” efforts that helped craft the bill; *wide support*, instances of which highlight the breadth of local, state, or national support for the bill regardless of whether or not the stakeholders intended the bill to experience such popularity; and *longevity*, which focuses exclusively on the length of time from conception to passage. For example, when Senator Tim Kaine mentions the “investment of necessary time” as a policy lesson from Senate passage of his *Virginia Wilderness Additions Act*, he’s talking about *longevity*, but when he lists as another lesson “find[ing] common ground,” he’s talking about *collaboration*.³³ Perhaps it is no surprise that legislators prioritize centering the legislative process even over a priori concepts like solitude and recreation?

³² Senator Dianne Feinstein, speaking on S. 32, on January 5, 2017, 115th Cong., 1st sess., *Congressional Record* 163, No. 3: 114-115.

³³ Senator Tim Kaine, speaking on S. 1975, on October 17th, 2017, 115th Cong., 1st sess., *Congressional Record* 163, No. 167: 6465.

Only one of the speeches examined mentioned Native Americans, and that theme is coded under *historic values*, a theme which appeared enough to warrant its own category, but often vaguely, giving no more information than that the bill honored generic concepts of historical or archeological values. In the single included instance, the *historic values* code is applied to a decision-maker referencing the historic nature of his own bill.

The iterative process of data analysis revealed differences between the themes of *access* and *activity*, both of which are coded beneath their parent code *recreation*, and which turned out to be less frequently highlighted than a priori assumptions may have led one to conjecture. While these themes do enjoy some overlap, in context it seemed appropriate to code *activity* as actions like camping, hiking, hunting, or horseback riding that physically take place in wilderness, and *access* as resembling an abstract contract of use, a value even to those who never physically take action on public land.

Access is also a sub-code for a second parent code designed to capture any instances of statements in which opposition to a wilderness bill is encouraged: *negative aspects*. Beyond process objections wherein Senators complain that certain rules or norms have been abandoned in order to pass wilderness bills, one main objection is raised: that they cut off *access*. As an example, Senator Cory Gardner uses passage of the 2019 Omnibus Public Lands package to address a long-standing issue for his constituents: “We have a community in the mountains where their water supply goes through a wilderness area. As a result, you can't take mechanized, motorized equipment to fix this water project, this waterway. So Congress has to pass a bill to allow this city to have the ability to fix its water system.”³⁴

³⁴ Senator Cory Gardner, speaking on S. 47, on February 12th, 2019, 116th Cong., 1st sess., *Congressional Record* 165, No. 27: 1180.

At the heart of our analysis is whether these floor speeches reflect any belief on the part of decision-makers that wilderness preservation and national security are linked as issues. As a theme, *national security* appears twelve distinct times in these twenty-one speeches: once in reference to the ability of a wilderness designation to protect the drinking water of “thousands of Oregonians,”³⁵ once in reference to the same’s ability to “mitigate climate change,”³⁶ and ten times in relation to a wilderness bill’s relevance to either extractive or renewable energy.

The ten instances in which floor speeches about wilderness touched on energy concerns reflect the current partisan debate on “natural security” that was first explored in this paper’s earlier literature review. On the one hand, Republicans argue that wilderness is a tool that “ignores the nation’s looming energy challenges” and is designed to “prohibit oil and gas development” by locking up large tracts of potentially resource-rich land.³⁷ These Senators perceive a growing worldwide instability related to the threat of resource scarcity and believe the best defensive posture the United States can adopt is one of total energy independence built on its existing oil and gas reserves.

On the other hand, Democrats denounce “Republicans and their oil industry allies [for] saying we need to allow drilling in the wildest place left in America so we can export even more oil to China and other foreign nations.”³⁸ Dubious to claims that the U.S. must dip into strategic oil reserves in order to maintain national security, one Democratic speech

³⁵ Senator Ron Wyden, speaking on the hard releases of wilderness study areas, on October 3rd, 2018, 115th Cong., 2nd sess., *Congressional Record* 164, No. 164: 6492.

³⁶ Senator Dick Durbin, speaking on S. 948, on April 26th, 2017, 115th Cong., 1st sess., *Congressional Record* 163, No. 71: 2560.

³⁷ Senator Lisa Murkowski, speaking on a leasing program within Alaska’s coastal plain, on January 5th, 2017, 115th Cong., 1st sess., *Congressional Record* 163, No. 3: S115.

³⁸ Senator Ed Markey, speaking on H.R. 1, on December 19th, 2017, 115th Cong., 1st sess., *Congressional Record* 163, No. 207: 8096.

explores ways the consolidation of wilderness "inholdings" - that is, orphaned parcels of land inside a wilderness area – could be consolidated and traded to states for the development of renewable energy projects.³⁹

Perhaps unsurprisingly, the majority of coded themes associated with wilderness bills are exclusively associated with conservation values. Still, the data shows that Senators will address national security concerns when talking about wilderness. This paper's next section will analyze the meaning of their inclusion of these concerns, and what conclusions might be drawn from the data explored herein, but first we will examine one final source.

Evaluation of Senate Questionnaire

In addition to text analysis, one structured interview, which took the form of a questionnaire completed by a U.S. Senator involved in wilderness protection, was conducted to help increase the validity of this paper's data findings. The questions provided to the Senator were designed to clarify just how national security issues color efforts to establish domestic land protections from conception to enactment, and the answers provide texture to the themes and trends explored above.

Just as *conservation* was a more prevalent theme than *national security* in the floor speeches that were examined, "the most persuasive argument" for this particular wilderness bill for the Senator was "hard work by local stakeholders." In fact, the Senator states that "local community buy-in was an essential" part of achieving Committee and Leadership support. Local buy-in, lack of opposition, and "themes of bipartisanship" come up multiple

³⁹ Feinstein, 115.

times in the Senator's narrative. In fact, the only traditional *conservation* value mentioned more than once is "hiking."

One of the instances in which the word "hiking" is used is in response to a question about how frequently during the legislative process constituents raised national security concerns with the Senator in relation to wilderness. While admitting that "national security was not a particular focus of the bill," the Senator admits that the topic did arise from time to time, including in conversations with "veterans" and "active-duty personnel stationed at nearby installations." These two groups reflect a growing acknowledgment, in the Senator's mind, of an increasing emphasis on the "restorative powers of time spend outdoors... particularly for veterans dealing with physical or psychological challenges after spending time in a conflict zone."

This theme of *recovery* wasn't present in the floor speeches examined, but it comes in response to a question about the arguments the Senator found most persuasive in being asked to sponsor a wilderness bill, alongside the recognition of the interconnectedness of land conservation and national security first examined in the literature review. The Senator says: "national security comes into play in many aspects of environmentalism and land conservation." He goes on to enumerate several areas of overlap, including increased economic and civil unrest caused by "climate-driven issues like drought, flooding, desertification, and sea level rise," the aforementioned REPI program, and the similar Defense Community Infrastructure Program, which is designed to leverage DOD monies to address off-installation infrastructure concerns with the potential to impact bases.

While an examination of floor speeches revealed the greatest partisan divide concerning wilderness protection appeared to exist where issues of energy independence

were concerned, the Senator flagged the partisan nature of climate change, saying: “it should come as no surprise that there is a partisan discrepancy between how seriously the two parties take the issue of climate change.” These differences arose when the Senator attempted to “stress with colleagues that this is a military necessity with environmental benefits, not the other way around.” This statement is perhaps the clearest demonstration of the nexus between national security and land protection offered by the interview.

Relatedly, the Senator did answer the last question, an open-ended query requesting any final thoughts on the topic, with this response: “America’s greatness comes less from the example of its power than from the power of its example. If you look at authoritarian regimes around the world past and present, environmental degradation is a characteristic of many of those countries. I believe... protecting our environment [is an] example to the world of how a democracy can function successfully and how natural resources can be something a country cherishes rather than exploits.” With this statement, the Senator seems to suggest that land protection is truly inherent to a broad concept of national security that takes into account the global reputation of the United States.

Conclusions

The examined data suggests that Senators are at least as aware of the connections between wilderness bills and national security issues as they are of the connections between wilderness and historic and/or recreation values, though understandably they highlight conservation values more often than either of these connections when talking about wilderness bills.

Though a review of the literature reveals myriad connections between public lands and national security concerns, including military readiness, food scarcity, and climate change, Senators tend to focus on energy independence and its relation to wilderness when they decide to speak on the latter topic in speeches on the U.S. Senate floor. On the one hand, Senators connect conservation of our public lands to wider efforts to move away from a dirty, extractive resource industry to cleaner technologies; on the other, the colleagues point to global instability as a reason not to lock up oil and gas beneath land designations that would prevent their removal.

The question posed at the beginning of this paper asked *what national security concerns, if any, do U.S. Senators consider relevant to domestic land protection issues?* After a round of data analysis tied to the floor speeches of U.S. Senators over the past five years, as well as an in-depth interview of a sitting U.S. Senator, the evidence suggests these decision-makers are aware of the interplay between land protection and national security, and that the connection is manifested most clearly in concerns about energy independence and stability.

The ramifications of these conclusions are unlikely to be impactful for two reasons. First, our data analysis shows that the foremost concern of U.S. Senators engaged in wilderness protection via the legislative process is fundamentally conservation. It's unlikely that environmental advocates will abandon the talking points that they find most emotionally compelling for their stakeholders if those talking points are also the most politically effective.

Secondly, energy security is an ongoing debate in which advocates in opposition to each other call for either more or less domestic oil and gas use, and they are likely to use

wilderness as a cudgel for the other side, offering no clear advantage. In fact, the data coded in our analysis as *national security* was by far the most partisan and divided media we examined, and Senators seeking consensus on their bills (or advocates coaching Senators on what to say as they shepherd these measures through the legislative process) might seek comity by shying away from national security frames in land designation debates.

Unfortunately, this analysis suffers from some limitations, and it's difficult to say how applicable it is to the wider field of study of legislative behaviors. Setting aside for a moment the challenges of conducting an analysis during a pandemic without access to traditional workspaces like a school library, this paper would have benefitted from more interviews with decision-makers, particularly if they could have been secured in a bi-partisan manner. No one is as capable at explaining the intricacies of a bounded system such as the U.S. Senate as those operating within the system itself. But while more interviews with U.S. Senators were sought, none were secured due in large part to the unique challenges facing our nation at this extraordinary time . While floor speeches were an acceptable alternative, they aren't as powerful a peek behind the curtain as interviews would have been, and the thought remains that the theatrical nature of those speeches hampers getting at the true, core beliefs of decision-makers. In fact, examining the extent to which floor speeches can be considered a genuine measure of a Senator's true decision-making process would itself make an interesting paper.

To that end, a researcher with more time and access might expand this study beyond floor speeches to include an examination of whether Congress sees fit to fund land conservation programs above the amount requested by the White House or Cabinet

Departments like Interior or Defense.⁴⁰ Further, additional relationships between national security and land protection might be discovered by implementing this paper's coding process *in reverse*: that is, analyzing the texts of floor speeches made on national security to see how often the issue of land protection is raised.

Additionally, because interviews with Senators would have allowed for rich, in-depth discussions that not only reveal what they believe to be important in the interplay between national security and land protection, but also what they don't consider important, no nexus of the two issues can be ruled out as important. Absence of evidence is not necessarily evidence of absence.

Finally, the literature surrounding the specific connection between national security and domestic land protection isn't exactly robust, and the field may have benefitted from a paper that explored those ideas more fully before attempting to determine their influence on each other within the legislative system.

Still, the paper offers a starting point for understanding the interconnectedness of national security issues and domestic land protection, and how a set of our nation's leaders thinks about them. The debate is a compelling one. Even as Americans find themselves recreating outdoors more and more, the strain on our natural resources continues to grow. In a world where environmental scarcity and conflict are becoming more common, can we afford to set aside landscapes for no other reason than to conserve them? Or is the very act of conservation by our public institutions a recognition of the humility required to address growing resources imbalances at home and across the globe?

⁴⁰ As this research paper was being written, Congress approved by large bipartisan majorities and President Donald Trump signed into law the Great American Outdoors Act, which among other things makes permanent the appropriation for the Land and Water Conservation Fund, which is paid for with royalties from off-shore drilling.

Appendix 1: Code Tree

Code	Description & Sample Excerpt
Conservation (Parent)	<p>Include any instances of decision-makers talking about the importance of the naturally- occurring qualities of a particular landscape to be protected.</p> <p><i>"Over the last 53 years, the Wilderness Act has been referred to as the gold standard of conservation, providing the highest level of protections for some of America's most treasured public lands."</i></p>
Development	<p>Include here any talk about wilderness in relation to development or urban sprawl.</p> <p><i>"...but also protects lands from potential mining and development projects--like removing the threat of mining and development in the Methow Valley in the State of Washington."</i></p>
Natural Resources	<p>Include any instances of talk about the natural beauty of the landscape to be protected. Words like "untrammled," "rugged," or "pristine" should be included here.</p> <p><i>"I am talking about the Devil's Staircase Wilderness area, which is 30,000 acres of rugged rainforest in our beautiful Oregon Coast Range. This is an untouched, pristine area, and it was named after a series of cascading waterfalls."</i></p>
Plants & Animals	<p>Include any instances of talk about the protection or appreciation of flora and/or fauna.</p> <p><i>"Congress later protected this amazing Arctic area and its ecosystem in order to protect the wildlife and protect the habitat because of its incredible diversity. The Arctic National Wildlife Refuge is really known as the "last great wilderness" in our country, one of the great, last wild places, but this legislation turns that on its head."</i></p>
Scenery	<p>Include any instances of talk about the protection of viewsheds. Include any talk about "sunrises" or "sunsets."</p> <p><i>"The desert's sweeping desert vistas and rugged mountain terrain not only provide for a truly remarkable backcountry experience, but also provide vital refuge for everything from bighorn sheep and desert tortoises to Joshua Trees and Native American artifacts."</i></p>
Solitude	<p>Include any instances of talk about opportunities for solitude on the landscape to be protected.</p> <p><i>"Few people have actually seen the waterfalls and the primeval stands of old-growth trees that surround it."</i></p>
Historic Values (Parent)	<p>Include any instances of talk about past actions or populations that are associated with the landscape to be protected.</p> <p><i>"I took a closer look, which everyone should, and found a unique part of America-- a wilderness area which can't be found anywhere else and a wilderness area which boasts archeological and historic and environmental significance way beyond what many people in the rest of the lower 48 might appreciate."</i></p>
Native American	<p>Include any talk about the preservation of Native American cultural or religious sites.</p> <p><i>"Designating these lands as wilderness would safeguard wildlife, protect ancestral lands, help mitigate climate change, and provide access to future generations of hunters, anglers, hikers, boaters, and lovers of the natural world."</i></p>

National Security (Parent)	<p>Include here any instances of wilderness framed as critical to the national security of the United states</p> <p><i>"Designating these lands as wilderness would safeguard wildlife, protect ancestral lands, help mitigate climate change, and provide access to future generations of hunters, anglers, hikers, boaters, and lovers of the natural world."</i></p>
Drinking Water	<p>Include talk about wilderness preserving clean water for public consumption</p> <p><i>"The Deschutes Canyon-Steelhead Falls Wilderness Study Areas contains cultural and historical artifacts, provides drinking water for thousands of Oregonians, and provides critical habitat for fish and wildlife species, some of which are threatened or endangered."</i></p>
Energy Independence	<p>Include talk about any contribution to energy independence.</p> <p><i>"We know we are going to need this oil in the years ahead. Now, some of my colleagues have suggested that somehow or other we don't need any more oil; that we are exporting oil now. Well, the reality is that world oil demand is rising; it is not falling. We need to bring more supply online, and we need to open up our most prospective areas. So, again, when we have a small area that has enormous potential, why would we continue to deny that opportunity?"</i></p>
Negative Aspects (Parent)	<p>Include any instances of talk about why a wilderness bill should be opposed.</p> <p><i>"First, the Forest Service determined that these lands were not suitable for wilderness in their final plan. In fact, that was a charge given by Congress in 1977. They said: Go out and study these Forest Service lands and tell us which acres are suitable for wilderness and which are not."</i></p>
Access (Negative)	<p>Include any talk about how wilderness designation would deny access to someone trying to use the area.</p> <p><i>"The other thing in this bill is Minturn, CO, which has a water system over a wilderness area and which for years has been trying to fix it. They can't because it is in a wilderness area. So we have to have an act of Congress to allow the city to fix their water system. Rejected tonight because we weren't allowed to vote on it tonight."</i></p>
Process Values (Parent)	<p>Include any instances of talk about how the shape of political or societal support surrounding the crafting or passage legislation imbues the same with meaning.</p> <p><i>"This text represents years of negotiation and compromise among Virginia stakeholders..."</i></p>
Collaboration	<p>Include here any instances of talk about cooperative work in the construction of the bill. Include words like "bipartisan" and/or "bicameral."</p> <p><i>"As I mentioned earlier, this bill represents the varied interests of desert stakeholders and balances the many uses of the California desert."</i></p>
Longevity	<p>Include here any instances of talk about the value in working on these bills over a period of years.</p> <p><i>"When everyone comes to the table and invests the necessary time, we can find common ground. I hope this will be a lesson for us in other tough policy challenges, and I encourage the Senate to support this bill."</i></p>
Wide Support	<p>Include here any talk about the breadth of community support for the legislation in question.</p>

Subsequently, the Forest Service convened the Lower Cowpasture Restoration and Management Project, bringing more stakeholders to the table, earlier in the process, to negotiate out how to manage this particular part of the Forest, located in the lower portion of the Cowpasture River watershed, in ways that work for everyone. Within this process, further compromises were made to achieve a mutually satisfactory project that could gather broad support. All members now support the wilderness additions identified in this bill.

Recreation (Parent)	<p>Include any instances of talk about the importance of human-focused recreation on the landscape to be protected.</p> <p><i>"The desert's sweeping desert vistas and rugged mountain terrain not only provide for a truly remarkable backcountry experience, but also provide vital refuge for everything from bighorn sheep and desert tortoises to Joshua Trees and Native American artifacts."</i></p>
Access (Positive)	<p>Include here any talk about the value of land to public land users.</p> <p><i>"It is an area that is so remote and so steep that hikers--who come from all over the country and literally from around the globe--when they come to Devil's Staircase, they can only gain access after a daylong ..."</i></p>
Activities	<p>Include here any talk about specific recreation activities that may take place on the landscape to be protected. Include instances of talk about "hiking," "camping," and/or "horseback riding."</p> <p><i>"Designating these lands as wilderness would safeguard wildlife, protect ancestral lands, help mitigate climate change, and provide access to future generations of hunters, anglers, hikers, boaters, and lovers of the natural world."</i></p>
Economics	<p>Use whenever recreation spending is listed as a virtue.</p> <p><i>"Taking care of our Nation's public lands is good for the economy and good for the environment."</i></p>

Appendix 2: Questionnaire Script

1. To begin, tell me about the [LAND/WATER PROTECTION BILL(S)] you cosponsored [THIS CONGRESS/LAST CONGRESS/RELEVANT CONGRESS]...
2. What were some of the arguments made by advocates that you found most persuasive in being asked to sponsor this bill?
 - 2a: What national security issues did advocates raise in conversations with you?
3. Tell me how you decided which arguments would be most persuasive in getting Committees and Leadership to move this bill through the legislative process?
 - 3a: What, if any, common themes came up in these conversations with your colleagues?
 - 3b: What national security issues did you raise with your colleagues in these conversations?
 - 3c: What national security issues did your colleagues raise with you in these conversations?
4. What non-profit or advocacy groups or related experts did you rely on throughout this process?
5. Tell me how you decided which arguments would be most persuasive in communicating to constituents why this bill was a priority for you and/or how it would impact them?
 - 5a: What feedback did you receive from your constituents during this process?
 - 5b: What national security issues did your constituents raise during this process?
6. How would you describe this achievement to a stranger today?
 - 6a: What impact do you believe this measure has had on your state?
 - 6b: What impact do you believe this measure had on national security?
7. Do you have any final thoughts or questions for me?

Bibliography

- Bozarth, Graci. "Winning on All Fronts: A Case Study of the Army's Compatible Use Buffer Program at Fort Riley, Kansas." *The Urban Lawyer* 48, no. 1 (2016).
- Busby, Joshua W. *Climate Change and National Security: An Agenda for Action*. Report. Council on Foreign Relations, 2007.
- "Congress Passes Manhattan Project National Historical Park Act," Atomic Heritage Foundation, December 12, 2014,
<https://www.atomicheritage.org/article/congress-passes-manhattan-project-national-historical-park-act>.
- Detraz, Nicole, and Michele M. Betsill. "Climate Change and Environmental Security: For Whom the Discourse Shifts." *International Studies Perspectives* 10, no. 3 (2009).
- Driessen, Paul. "Greens Shackle National Security – And Renewable Energy." *Energy & Environment* 22, no. 4 (2011).
- Gilroy, John. "Nevada Wildlife Refuge Would Gain Wilderness Status Under Bill in U.S. Congress," The Pew Charitable Trusts, February 13, 2020,
<https://www.pewtrusts.org/en/research-and-analysis/articles/2020/02/13/nevada-wildlife-refuge-would-gain-wilderness-status-under-bill-in-us-congress>.
- Homer-Dixon, Thomas F. "Overview." In *Environment, Scarcity, and Violence*, 12-27. Princeton, New Jersey: Princeton University Press, 1999.
- Kuli, Alex. "Authorizers Endorse More Funding For Conservation Buffer Zones." *Inside the Pentagon* 21, no. 24 (2005).
- Lachman, Beth E., Anny Wong, and Susan A. Resetar. "How Encroachment Is Being Addressed." In *The Thin Green Line: An Assessment of DoD's Readiness and Environmental Protection Initiative to Buffer Installation Encroachment*. RAND Corporation, 2007.
- Levy, Marc A. "Is the Environment a National Security Issue?" *International Security* 20, no. 2 (1995).
- McElroy, Michael B., and D. James Baker. "Climate Extremes: Recent Trends with Implications for National Security." *Vermont Journal of Environmental Law* 15, no. 4 (2014).
- Omnibus Parks and Public Land Management Act of 1996*, U.S. Code 16 (1996).

- Parthemore, Christine, and Will Rogers. *Report*. Center for a New American Security, 2010.
- Ross, Michael L. "What Have We Learned about the Resource Curse?" *Annual Review of Political Science* 18 (May 2015).
- Ruple, John and Heather Tanana. "Debunking the Myths Behind the NEPA Review Process." *Natural Resources & Environment* 35 (January 2020).
- United Nations International Panel on Climate Change, 2019. August 7, 2019. "Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems."
https://www.ipcc.ch/site/assets/uploads/2019/08/4.-SPM_Approved_Microsite_FINAL.pdf.
- U.S. Congress. *Congressional Record*. 115th Cong., 1st sess., 2017. Vol. 163, no. 3.
- U.S. Congress. *Congressional Record*. 115th Cong., 1st sess., 2017. Vol 163, no. 71.
- U.S. Congress. *Congressional Record*. 115th Cong., 1st sess., 2017. Vol. 163, no. 167.
- U.S. Congress. *Congressional Record*. 115th Cong., 1st sess., 2017. Vol 163, No. 207.
- U.S. Congress. *Congressional Record*. 115th Cong., 2nd sess., 2018, Vol. 164, no. 164.
- U.S. Congress. *Congressional Record*. 116th Cong., 1st sess., 2019. Vol 165, no. 27.
- U.S. Library of Congress, Congressional Research Service, *Federal Land Ownership: Overview and Data*, by Carol Hardy Vincent, Laura A. Hanson, and Lucas F. Bermejo, R42346 (2020).
- Van Der Ploeg, Frederick, and Steven Poelhekke. "Volatility and the Natural Resource Curse." *Oxford Economic Papers*, New Series 61, no. 4 (2009).
- Vassar, CC. "'NRDC v. Winter': Is NEPA Impeding National Security Interests?" *Journal of Land Use & Environmental Law* 24, no. 2 (2009).
- Vogel, Catherine M. "Military Readiness and Environmental Security – Can They Co-Exist?" *Real Property, Probate and Trust Journal* 39, no. 2 (2004).
- Wallace, Jacob. "CORE Act passes U.S. House as rider to national defense bill." *The Durango Herald*. July 21, 2020. <https://durangoherald.com/articles/332576>.
- The Wilderness Act*, 16 U.S.C. (1964) § 1131

Anders Reynolds is currently Federal Legislative Director for the Southern Environmental Law Center, and serves as Board Chair for Southern Appalachian Wilderness Stewards (SAWS). Born in Memphis, TN in 1982, he earned a B.A. from Rhodes College in 2004, and has extensive political and conservation experience, including serving as Legislative Director to former Congressman Marion Berry (AR-01), and Campaign Director for Chad Causey's 2010 campaign for U.S. Congress. Formerly, he worked as a Policy Officer on Pew Charitable Trusts's U.S Public Lands Team, and as Federal Policy Advisor for the Delta Regional Authority during the Obama Administration.